

PERSPEX® Cast Acrylic Sheet

| Property | Test Method | Conditions | Units | Value |
|----------------------------------|-------------|------------|-------------------|-----------|
| Physical | | | | |
| Relative Density | ISO 1183 | | g/cm ³ | 1.19 |
| Water Absorption | ISO 62 | | % | 0.2 |
| Mechanical | | | | |
| Tensile Strength at Yield | ISO 527 | 5mm/min | MPa | 75 |
| Tensile Strength at Break | | | | |
| Elongation at Yield | | | | |
| Elongation at Break | ISO 527 | 5mm/min | % | 4 |
| Tensile Modulus of Elasticity | | | | |
| Flexural Modulus | ISO 178 | 2mm/min | MPa | 3210 |
| Flexural Strength at Yield | ISO 178 | 2mm/min | MPa | 116 |
| Izod Impact Strength | ISO 180/1A | notched | kJm ⁻² | N/A |
| Charpy Impact Strength | ISO 179 | unnotched | kJm ⁻² | 12 |
| Impact Falling Weight | | | | |
| Rockwell Hardness | ISO 2039-2 | | M Scale | 102 |
| Thermal | | | | |
| Service Temperature | | | °C | -40 to 80 |
| Heat Distortion Temperature | | | | |
| Vicat Softening Temperature | ISO 306 | | °C | >110 |
| Coefficient of Thermal Expansion | ASTM D-696 | | mm/m°C | 0.077 |
| Thermal Conductivity | | | | |
| Specific Heat Capacity | | | | |
| Optical | | | | |
| Light Transmission | ASTM D-1003 | 3mm sheet | % | >92 |
| Refractive Index | ISO 489/A | | | 1.49 |
| Yellowness Index | | | | |
| Haze | | | | |
| Electrical | | | | |
| Dielectric Strength | IEC 243 | | kV/mm-1 | 15 |
| Surface Resistivity | IEC 93 | | Ω m-2 | >1014 |

Other physical properties and values available on request.

Flammability

| Standard | Classification |
|---------------|--------------------|
| BS 476 Part 7 | Class 3 |
| UL 94 | HB |
| NFP 92-307 | M4 (without drips) |